

SECTION 15150

SANITARY WASTE AND VENT PIPING

LANL MASTER CONSTRUCTION SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the Engineering Standards Manual (ESM) Mechanical POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General requirements.

Delete information within "stars" during editing.

Refer to Specification 02538 for site sanitary sewer system.

Specification developed for ML-3 / ML-4 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Building piping, fittings, and accessories within 5 feet of building wall.

1.2 SUBMITTALS

- A. Submit the following in accordance with Section 01330, Submittal Procedures:
 - 1. Catalog data on pipe materials, fittings and accessories.

PART 2 PRODUCTS

2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

- A. Comply with Section 01630, Product Options and Substitutions.

2.2 SANITARY WASTE PIPING, BURIED WITHIN 5 FEET OF BUILDING

- A. Cast Iron Pipe and Fittings: ASTM A74 service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.

2.3 SANITARY WASTE AND VENT PIPING, ABOVE GRADE INSIDE BUILDING

- A. Cast iron pipe and fittings: CISPI 301 hubless, service weight.
 - 1. Joints: CISPI 310, neoprene gaskets and stainless steel clamp/shield assemblies.
- B. Cast iron pipe and fittings: ASTM A74 service weight.
 - 2. Joints: Bell and spigot, ASTM C564 rubber gaskets.

Specify the following (2.3.C) for pressure systems (non-gravity)

- C. Ductile Iron Pipe: AWWA C151, Class 150.
 - 1. Fittings: AWWA C110, Ductile-Iron or Gray-Iron, Class 350 or AWWA C153, Ductile-Iron Compact Fittings, Class 350.
 - 2. Joints: Bell and spigot, AWWA C111 rubber gaskets.

2.4 FLOOR DRAINS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select floor drains with sufficient size and free area to pass anticipated flow. Refer to manufacturer's catalog data for selection criteria.]

2.5 FLOOR SINKS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Specify floor sinks when the discharge of indirect waste pipes discharge into the sanitary waste system. Refer to manufacturer's catalog data for selection criteria.]

2.6 CLEANOUTS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select cleanouts to suit project. Refer to manufacturer's catalog data for selection criteria.]

PART 3 EXECUTION

3.1 PREPARATION

- A. Ream pipe ends and remove burrs.

3.2 INSTALLATION

- A. Comply with Uniform Plumbing Code (UPC).
- B. Extend cleanouts to finish floor or wall surface. Lubricate threaded cleanout plugs with non-hardening thread lubricant. Ensure clearance at cleanout for snaking drainage system.
- C. Encase exterior cleanouts in concrete, flush with grade.
- D. Install floor cleanouts at elevation to accommodate finished floor.
- E. Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
- F. Install piping penetrating roofed areas to maintain integrity of roof assembly.
- G. Install bell and spigot pipe with bell end upstream.
- H. Sleeve and caulk pipes penetrating exterior walls or interior bearing walls. Provide waterproof installation for exterior walls. Provide UL/FM approved through-penetration firestop system when penetrating fire-rated barriers (i.e., walls, floors, etc.).
- I. Test piping system with water in accordance with Section 15992.
- J. Label piping in accordance with Section 15075.
- K. Support piping in accordance with Section 15060.

3.3 LANL ACCEPTANCE INSPECTION

- A. Notify LANL Construction Inspector at least 10 working days in advance to schedule inspection of piping system.
- B. LANL Construction Inspector to ensure all drains or buildings connected to the sanitary collection system has an approved Waste Profile Form (WPF) for discharge to the sanitary sewer for all anticipated wastewater. Documentation shall be submitted to the LANL Utility Group wastewater representative.

END OF SECTION

Do not delete the following information:

FOR LANL USE ONLY

This project specification is based on LANL Master Construction Specification Rev 2, July 16, 2003.